



rhode island **DEPARTMENT OF TRANSPORTATION**
2000 ANNUAL REPORT

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COVER PHOTO: The Rhode Island Department of Transportation Headquarters at Two Capitol Hill in Providence, Rhode Island prior to the installation and opening of the Smith Street raised crosswalk in November 2000.

message from **GOVERNOR LINCOLN ALMOND**



Governor Lincoln Almond

Dear Rhode Islanders:

As we look back on the accomplishments of the past few years, we must recognize the progress we have made.

Nearly five years ago, close to 40 percent of our pavement was in poor condition. We determined that the best way to improve our roadways was to adopt a “Fix it First” philosophy. That enabled us to allocate the majority of the Rhode Island Department of Transportation’s funding to securing current infrastructure before undertaking new projects. Consequently, last year, only 25 percent of our roads needed enhancement. Over the next two years, we should be down to 13 percent.

I appreciate the support of Rhode Island citizens for a \$62.5 million transportation bond last November enabling the Department to continue financing steady improvements to our roadways.

Our bridge maintenance program, designed to better track the condition of the state’s bridges, continued to be a tremendous success last year. We celebrated the opening of two rehabilitated bridges, the Veterans Memorial Bridge (Court Street Bridge) in Woonsocket and the Joseph A. Russo Memorial Bridge (Ashton Viaduct) in Cumberland, reestablishing vital links to the surrounding communities.

“I appreciate the support of Rhode Island citizens for a \$62.5 million transportation bond last November enabling the Department to continue financing steady improvements to our roadways.”

We also witnessed the Department’s quick and timely response to the repair of the Route 37 East overpass, that had been damaged and temporarily shut down as the result of a jet fuel tanker truck accident.

Further striving to improve the safety of our transportation system for all Rhode Islanders, the Department had a pivotal role in helping pass crucial traffic safety legislation.

This included: stiffer penalties for drunk drivers; a graduated drivers license bill; a bike helmet law for children under the age of fifteen; a \$50 penalty for failing to wear a seatbelt; a child endangerment law; and an open container law.

Continuing our commitment to improving the quality of life for our state’s residents, the Department announced the opening of the newest phase of the South County Bike Path and the groundbreaking for the next phase of the Blackstone River Bike Path.

On behalf of the State of Rhode Island, I commend the Department for all of its efforts in 2000. We look forward to reaping the rewards of their accomplishments throughout the coming years.

Sincerely,

A handwritten signature in dark ink, appearing to read "Lincoln Almond". The signature is fluid and cursive, with a large initial "L".

Lincoln Almond
Governor

message from RIDOT DIRECTOR WILLIAM D. ANKNER, Ph.D.

Since I was chosen by Rhode Island Governor Lincoln Almond to serve as RIDOT Director, over the past four years I have been driven to create the best transportation system in the Northeast by: fixing our existing infrastructure first before creating new projects; providing better maintenance for our roads and bridges; preserving a better quality of life for Rhode Islanders through our bike and pedestrian path network; and listening to the community to see how we can best meet their needs.

Throughout my tenure, I have relied on our staff, recognizing their accomplishments and learning more about the pivotal roles they play within the communities we serve. Of particular admiration this year was the exemplary performance delivered by four maintenance workers in the Portsmouth facility who, while mowing in town, found and returned nearly \$7,000 in cash. The local media covered their story and the Governor rewarded the workers with citations and a ceremonial photograph.

These employees are just a few of the dedicated staff members at RIDOT. The Department, rightfully so, prides itself on having a well-trained workforce. Considerable emphasis is placed on encouraging employee participation in educational opportunities through the National Highway Institute, local colleges



RIDOT Director William D. Ankner, Ph.D. briefs the media following the jet fuel tanker truck accident on Route 37 in July.

“Throughout my tenure, I have relied on our staff, recognizing their accomplishments and learning more about the pivotal roles they play within the communities we serve.”

and universities, and the Department of Administration (DOA) Office of Training and Development. RIDOT is committed to the Governor’s goals of building a more competitive and diverse workforce through our active participation in a Management Development Institute (MDI) pilot project. The MDI project, led by the DOA, is tasked with implementing specific training programs for mid-level and senior managers.

RIDOT also prides itself on its ability to manage the state’s transportation system. This year marked notable activity on several major projects. The Freight Rail

Improvement Program (FRIP), a federal program designed to preserve and expand the state’s capabilities for rail service, is underway. Property acquisitions were made for both the Quonset Point Access Highway (Rte. 403) and Interstate 195. We were also successful in our regionalism efforts, by adding more commuter trains to the area through the Pilgrim Partnership agreement celebrated this year in Providence with Massachusetts Governor Paul Cellucci.

With regards to trains and further modes of travel, our new vision for the Warwick Train Station is geared towards improving transportation services and supporting economic development opportunities in the Warwick Station Redevelopment District. Our vision entails moving all rental car operations into a consolidated intermodal facility adjacent to the train station and using a people mover to connect all ground transportation services to the airport.

This vision, which we call intermodalism, represents the present and future of RIDOT, and as Director I’m proud to lead the way.

Office of Communications

The major role of the Office of Communications is to positively promote the Rhode Island Department of Transportation through interaction with the general public, the legislature and the media.

As the Department's spokesperson and primary media liaison, the Office responds actively and rapidly to requests for information and disseminates that information out through correspondence, media interviews and press releases. In 2000, the Office issued nearly 125 releases.

Another activity of the Office is event coordination. Working with the general public, the legislature, other state agencies, the Governor and the Congressional Delegation, the Office handles all aspects of each event from securing a location, inviting guests, setting an agenda, writing speeches and issuing media advisories and press releases.

The Office also works hand in hand with the Governor's Office on Highway Safety to advocate for and promote safety on Rhode Island's roadways. Utilizing an emotional advertising campaign and real-life families of victims as spokespeople, the 2000 campaign successfully contributed to the passage of .08 legislation in our state.



Director Ankner addresses the crowd during an event celebrating the completion of the Wakefield Street project in West Warwick.

This section also manages all content on the Department's web site (www.dot.state.ri.us), designing and creating most of the site's content. Included on the site are traffic-related construction and weather updates, links to local public transportation services, descriptions of current and future construction projects, the Department's organization chart and directory, Department news, and online versions of its quarterly newsletter and annual report.

A congestion alert now appears on the Traffic Forecast page (www.dot.state.ri.us/webcom/curtraf.htm). This alert notifies motorists of immediate problems on the roadways, giving them a chance to choose alternate routes. Planning continues toward providing live highway video images on the Department web site in the coming months.

The Office also designs and develops RIDOT's quarterly newsletter - *Transportation Digest* - highlighting news and events of the Department, and accomplishments of its employees, and the Department's *Annual Report*.

As in the past several years, 2000 also brought national recognition to the Office of Communications with the receipt of several awards relating to the successful .08 campaign:

- First Place from the National Commission Against Drunk Driving (NCADD) in their Education and Prevention Category;
- Honorable Mention for a Press Release, Video News Release, or Story Printed in Media from the National Transportation Public Affairs Workshop (NTPAW), a division of the American Association of State Highway and Transportation Officials (AASHTO); and
- a NHTSA (National Highway Traffic Safety Association) Best Practices Award for Issues Management.

Office of Legal Counsel

The Office of Legal Counsel provides legal services to the Department encompassing a variety of issues that relate to the Department and/or its staff.

The Office investigates and reviews all complaints, claims and demands against the Department. Staff counsel is responsible for handling all aspects of litigation with respect to condemnation and land acquisition matters, demands under the Public Works Arbitration Act, collections, bankruptcy, labor and employment, administrative actions, contracts, and serves as in-house counsel working in conjunction with the Department of Attorney General in reference to tort litigation.

It drafts all Departmental legislation and coordinates the tracking of other legislative actions that may have an impact on the Department.

The Office of Legal Counsel is also responsible for drafting Departmental regulations and procedures and works with the numerous Departmental Divisions in developing and negotiating contracts and agreements, especially with respect to real estate and environmental issues.

In addition, the Office coordinates the release of information under the Public Access to Records Act and is responsible for responding to subpoenas. All labor grievances, arbitration and litigation are handled by the legal staff including participation in statewide negotiations of collective bargaining agreements.

This past year the Office of Legal Counsel was particularly involved with the real estate acquisition phase of the historic relocation of Interstate Route 195, development of the Warwick Train Station, the acquisition of the property right-of-way for a new Route 403 highway, various bridge projects, development of a Pawtucket commuter train layover facility, and the redevelopment of the Cranston Brewery site.

The Office of Legal Counsel continues its involvement in the Amtrak electrification expansion, Freight Rail Improvement Project (FRIP), bike paths and other issues involving intermodal transportation. The input of this Office remains crucial to successfully achieving the advancement of major transportation initiatives benefiting the State of Rhode Island.

Real Estate and Property Management

Real Estate and Property Management had a record-breaking year. The Real Estate unit is responsible for the acquisition of land and easements required for the construction and reconstruction of the State Highway System in accordance with the Federal Highway Administration Guidelines and the General Laws of the State of Rhode Island.

Responsibilities include:

- Real Estate Appraisal
- Review Appraisal
- Negotiations
- Relocation

Additionally, this section has significant input into the review and comment process of highway location studies, draft Environmental Impact Statements (EIS), development of preliminary right-of-way cost and relocation estimates, contracting for title examinations and, when necessary, handling the functional replacement of a special use facility located within the right-of-way.

The Property Management Unit is responsible for the orderly management and disposal of acquired structures and/or surplus land.

Responsibilities include:

- Conveyance/Auctions (surplus land and improvements)
- Lease/License (use of air space)
- Grant of easements
- Telecommunication issues (fiber optic/towers)
- Outdoor advertising control (billboards, etc.)

Major Milestones - 2000 (Real Estate)

- **Relocation 195** – Real estate activity for one the largest highway projects in the state's history is well underway. Approximately 83 residential owner/tenants and businesses have been registered for relocation assistance. To date, approximately 22 properties have been acquired and eight more are scheduled for January 2001. Of the 83 relocations, we have relocated approximately six residential owner/tenants and 44 businesses. The remaining acquisitions and relocations will be complete by June of 2001.
- **Pilot Program** – In conjunction with the Relocated 195 Project, the Department was selected by the Federal Highway Administration to take part in a nationwide "pilot program" regarding relocation

benefits and assistance. This program is designed to study the impact highway projects have on businesses. When completed, the results of the study will be presented to a congressional committee in hopes of increasing benefits to business owners/tenants in the future.

- **Telecommunications/Fiber Optic Corridor** – We have successfully negotiated a 30-year agreement that allows for the construction of a 46 mile fiber optic corridor. Not only will it generate significant revenue to Rhode Island it will expand the state's fiber optic capacity. We continue to actively negotiate with communication companies, towers and fiber, for the use of our right-of-way.
- **Warwick Train Station Project** – The Department has acquired the property for the proposed Warwick Intermodal Station, including the Baylis Chemical property, Leviton Manufacturing (parking lot only) and the Budget Rent-a-Car site. The environmental site remediation continues on the Baylis property.
- **Relocated Route 403 (Quonset Point/Davisville)** – another high profile priority project that is moving forward. Several parcels (inclusive of two motels and an auto body shop) have been successfully

negotiated and the title now belongs to the State of Rhode Island. The remaining properties are scheduled for filing in January 2001. Relocations are on schedule and we anticipate that the right-of-way for Phase I /Post Road Interchange will be cleared by the first quarter of 2001. It is important to note that through our successful negotiations, the Rhode Island Economic Development Corporation donated the land needed for the roadway thereby creating a significant state "soft match" for the project funding.

- **Bikeways** – We have completed approximately 95% of the acquisition needed for the Blackstone Valley Bikeway (Segment 4). In addition, right-of-way activity has begun on the remaining portion of the Washington Secondary (West Warwick/Coventry), and the Ten Mile River Greenway in East Providence.
- **Bridges** - Finally, we completed acquisitions for several bridge projects, i.e., Ashton Bridge (95%), Rocky Hollow Bridge, Garnet Street Pedestrian Overpass, Cranston Street Bridge (FRIP), Greenwood Railroad Bridge, and Hunt's River Railroad Bridge.

Major Milestones - 2000 (Property Management)

Marketing Excess Property - We continued to aggressively market excess RIDOT owned property; work concluded to date has yielded several marketable parcels that will be auctioned or licensed to the private sector.

- Collected approximately \$2,781,616 in revenue from all sources (i.e., conveyances, rent, telecommunications, and outdoor advertising) during the 2000 calendar year.
- We received earnest money deposits for 20 new land sale requests.
- We increased the number of leases/licenses of state property.
- Increased revenues from a major communications carrier (Personal Communications Systems/PCS towers and fiber optics).
- Of the collected revenue Outdoor Advertising generated \$59,435 in permit fee renewals.
- Continued to update our inventory of surplus property (over 600 parcels) for potential sale/auction at a later date.

With the close of a successful year, our Section looks forward to new challenges for 2001. We expect to complete the right-of-way activity for the Relocation of I-195, Relocated Route 403, and relocation assistance for the Warwick Intermodal Train Station. In addition, we expect to continue negotiations with major telecommunications companies for fiber optics runs within the state while generating income and/or barter for future transportation needs.

Active projects scheduled for the year 2001 include completion of right-of-way activities for Sockanosset Crossroads, Route 138 in Middletown, and Breakneck Hill Road in Lincoln. Additional work will involve various Freight Rail Improvement Projects, and Greenway/bikeway projects.

Claims Administration

Unit Objective

To minimize Departmental liability through the application of risk management principles, and to provide fair, consistent, reliable, and rapid resolution via our claims processes. Responsibilities of the Unit include the development of policy and procedures, claims mitigation, claims analysis, and management of claims according to the procedures developed.

Tort Claims - Involves all claims made in tort against the Department except claims involving fleet vehicles covered by the state's insurer, and claims originating in contractor or permittee work zones, as follows:

Pothole Claims - As provided via *RIGL 28-8-35. Damage caused by potholes - Claims against the state, and RIGL 42-13.1 (b) Establishment - Head of departments - Powers, and Rules & Regulations* promulgated thereunder, and the Department's Pothole Procedure.

All Other Tort Claims - We investigated and adjudicated all tort claims coming before us subject to the provisions of *RIGL 9-31 Governmental Tort Liability, RIGL 22-7 Joint Committee on Accounts and Claims*, the Department of Administration's Procedural Handbook A-49 "Payment of Claims," and the Department's Tort Claims Procedure.

Tort Claims Database - Claims Administration developed and maintained a comprehensive, shared, tort database for managing tort claims. This database currently consists of thousands of individual records in over 50 different categories of tort claims going back to 1996 (FY 1998 first full year), and contains additional detailed information regarding the originating incident, the location, the type of vehicle, damages incurred, an assessment of liability, disposition, and a complete history.

We are capable of generating detailed reports, as may be required for identifying accident patterns, frequencies, claims approved, disapproved, individual claim history, etc.

Liaison with the Legislative Joint Committee on Accounts & Claims -

Claims Administration maintained a dialogue in cooperation with the Joint Committee by providing the results of our investigations via testimony or written report, as well as advising as to our recommended disposition.

FY 2000 Program OUTPUT MEASURES

Pothole Claims FY 00

Total Number Received	67
Dollar Value	\$19,734
Number Approved	67
Dollar Value Approved	\$10,547

Note: Does Not Include Pothole Claims Denied by Maintenance

Tort Claims FY 00

Total Number Received	133
Dollar Value	\$99,697
Number Approved	15
Dollar Value Approved	\$5,363
Number Denied	118

Internal Audits

Internal Audit reports to the Executive Counsel for Department of Transportation. The Office conducts independent reviews of operations to determine compliance with policies, procedures and applicable state law and continues to provide support, if necessary, through trial and appeal.

In 2000 and 2001 the Unit helped secure fraud convictions in District and Superior Court.

Governor's Office on Highway Safety

The Governor's Office on Highway Safety (GOHS) concentrated on drunk driving, aggressive driving, pedestrian safety, underage drinking, seatbelts, and child passenger safety programs in 2000.

In cooperation with GOHS, law enforcement agencies helped implement education programs to inform the public of Rhode Island's seat belt law. Local enforcement agencies also participated in GOHS's seatbelt and child restraint training programs and conducted seatbelt enforcement funded through the National Highway Traffic Safety Administration (NHTSA).

This Office also funded special Rhode Island State Police projects. The projects included special emphasis on speed limit enforcement, and Driving While Intoxicated (DWI) enforcement during the holiday travel season. GOHS continued use of the "Convincer Program," in which a mechanical device simulates a 5 m.p.h. car crash in an effort to educate and heighten the public's awareness of the benefits of seatbelt use.

The GOHS continued its mission to formulate public information and education programs, and legislative and administrative changes through the Rhode Island Traffic Safety Coalition, focusing on highway safety issues and helping to reduce death and injury on our state's highways.

The Coalition is made up of more than 80 special interest and non-profit Highway Safety related groups and organizations. Some members include volunteers from the American Automobile Association (AAA), Mothers Against Drunk Driving (MADD), State and local police, insurance companies, advocacy groups, hospitals, the General Assembly, the Governor's Office, the Lieutenant Governor's Office, the Attorney General's Office, and the Rhode Island Departments of Health, Education, and Transportation.

Based on the Coalition's recommendations, Governor Lincoln Almond announced six safety initiatives in December of 1999 to be introduced during the 2000 Legislative Session.

The Legislative package included:

- lowering the blood alcohol level for adults from .10 to .08;
- defining aggressive driving;
- increasing fines, assessments, and license suspension time for refusal to submit to a breathalyzer or chemical test;
- a more comprehensive child restraint law;
- a standard seatbelt use law;
- and a DWI/suspended license vehicle forfeiture law.

Of the six legislative initiatives set forth by the Governor, two became law in 2000, .08 and aggressive driving.

Office of Human Resources

The Office of Human Resources has overall responsibility for administering a comprehensive human resource management program.

The Office's responsibilities include:

- Providing technical assistance to Divisional Administrators;
- Managing the internal personnel administration system;
- Managing labor relations contract administration;
- Assuring equal opportunity in program administration;
- Administering, organizing, and coordinating staff development and training activities;
- Coordinating management staff initiatives; and
- Overseeing payroll and fringe benefit programs.

The Office seeks to provide and support a quality internal workplace environment for all employees.

During 2000, the Office:

- Coordinated a Summer Student Civil Engineering Employment Program for which 40 students from various engineering schools participated. URI and Roger Williams University students enrolled in our Fall co-op program.
- Received approval from state equal opportunity authorities for the Annual Affirmative Action Plan.

- Served as the lead agent among other state agencies for the administration of the state's Commercial Driver's License Drug & Alcohol Testing Program.
- Assisted in renegotiating labor contracts with our three state employee unions.
- Monitored departmental compliance with the Americans With Disabilities Act (ADA) and served as liaison with the Governor's Commission on Disabilities.
- Assisted in the development of the state's Management Development Institute as directed in the Governor's Executive Order #4 "Promotion of a Diverse State Government Workforce."
- Served as liaison for the Department with the District FHWA office for human resource equal opportunity and training program issues.
- Attended various AASHTO conferences and seminars.

Staff development needs are currently being reassessed in order to maximize the available federal highway training funds. A special emphasis will be placed on workplace and workzone safety activities in the coming year.

financial management **DIVISION**

Office of the Associate Director

The Associate Director serves as the Chief Financial Officer (CFO) of the Department, with oversight authority over all financial transactions in the Department. The CFO reports directly to the Director.

The Department of Transportation has historically had a decentralized financial management system, with components of the accounts payable, accounts receivable, purchasing, planning, and contracts being performed by several diverse units in multiple divisions. The CFO was introduced in FY 1998 to bring coordination and standardization to the financial aspects of the Department. While many functions will continue to be decentralized, central oversight will be the responsibility of this office.

Unit Objectives

- Insuring all activities of the Department are based on sound financial practices;
- Monitoring the construction and capital programs to make sure they are adequately financed;
- Insuring that federal funds and other reimbursement is sought on a timely basis;

- Monitoring expenditures to insure that they match the established programs as established by the Planning Division;
- Working with the Planning Division to make plan modifications necessary to guarantee the controlling amount “earned-but-unbilled” and “advanced construction” carried by the Department;
- Monitoring all contracts, purchase orders, change orders and other contracting vehicles to ensure compliance with state and federal laws and regulations.

Fiscal Year 2000 Accomplishments

The Financial Management Division, along with the Policy and Planning Division has continued to develop long term capital plans to position the Department for the massive capital program anticipated over the next 10 to 15 years.

Representatives from the Government Accounting and Standards Boards (GASB) were brought in and a joint session was held with the State Budget Office, the Accounts and Control, the Auditor General and the Department. All senior members of the Division have been attending training and making preparations for the implementation of GASB-34, a new way to report assets. The Finance and Planning Divisions had a two-day summit to develop plans for a reorganization of the Department’s Chart of Accounts and to plan the development and

implementations of Indirect Cost Centers. Blueprints for the implementation of the new account structure and the cost centers were developed for implementation in FY 2001.

The Division continued its efforts with the Planning Division to develop and implement a comprehensive computerized financial management system.

Fiscal Year 2001 Program

The Financial Management Division, in conjunction with Federal Highway will be implementing indirect cost centers as an alternative to direct project charges for supplies, equipment, and support services.

A new account structure has been developed and approved by the Department of Administration. This structure will make it easier for the Department and the state to accurately track federal expenditures, matching expenditures and the source of funding for projects.

The new structure is scheduled to be implemented on January 1, 2001. The plan is to adjust Quarter 1 and Quarter 2 expenditures and have the new accounting system fully implemented for the new fiscal year. The new computerized accounting system is scheduled to be implemented in February of 2001.

Fiscal Year 2002 Program

The main goal for FY 2002 is to comply with GASB-34.

Finance Section

The Finance Section maintains oversight and administration of the Department's total operating and highway expenditures, which in FY 2001 totals \$342,000,000. This Unit is also responsible for coordinating the timely submission of the Department's annual operating and five year capital development budgets.

Unit Objective

To maintain oversight of the financial resources of the Department and to assure that expenditure from all funding sources are in accordance with the Department's objectives and applicable laws and/or federal regulations.

- Prepared and submitted the FY 2001 operating budget to the State Budget Office in the amount of \$397,439,573;
- The first full year of the weekly vendor payroll system created in FY 2000 to assure the timely and systematic issuance of payments to contractors generated \$128 million in payments to contractors;

- Presented Department operating needs to State legislators, resulting in a 1 and ° cent gas tax increase to the operating budget in FY 2001;
- The Business Management Office processed all expenditure vouchers and maintained files on all open purchase orders while assisting other fiscal personnel within the Department;
- Calculated and submitted quarterly expenditure projections to the House and Senate Fiscal Advisors;
- Submitted required quarterly reports to the Secretary of State for consultant expenditures;
- Continued funding initiatives for road resurfacing, bridge maintenance, equipment replacement, statewide crack sealing, litter removal and drainage improvements;
- Created Y2K contingency plans for the Department in anticipation of the millennium date change and its potential impact on the Department's computer systems;
- Submitted the Department's Financial Integrity and Accountability Annual Report to the Governor's Office.

Fiscal Year 2001 Program

- Continue to monitor the equipment and maintenance initiatives that began in FY 1998 to assure timely and efficient use of the funds that have been committed;

- Assist all divisions, as needed, with the implementation of fiscal policy changes initiated by the State Controller;
- Compile and submit the operating budget for FY 2002;
- Implementation of the reorganized highway fund accounts that will provide a system of greatly improved expenditure accountability;
- Implementation of the Financial Management and Project Tracking System (FMPTS);
- Assist all divisions with the creation of program and performance measures.

Fiscal Year 2002 Program

- Prepare and submit the annual operating budget, which details the planned expenditure of over \$400,000,000;
- Provide testimony at budget hearings conducted by the House and Senate Finance Committees to justify the requests made;
- Assist in the preparation and submission of the five year capital development budget;
- Continue to provide annual projections of expenditures to the House and Senate Fiscal Advisors;
- Assist Division of Maintenance to fully utilize additional gas tax made available for equipment replacement;
- Monitor the Department's revenue streams to maintain cash levels sufficient to cover all vendor obligations;

- Monitor financial management systems established in FY 2001 and adjust and refine where necessary.

Federal Programs

The chief responsibility of the Federal Programs Section is to bill the Federal Highway Administration (FHWA), United States Department of Transportation for all federally reimbursable costs attributed to the Highway Program. This Office processes, reviews and approves all invoice vouchers, purchase orders, requisitions, contract addenda, payroll charges and state vehicle charges that have a direct correlation to Federal-aid projects. It also manages all financial aspects of Federal-aid projects, from their inception to the final voucher process. Once the Office of Accounts and Control pays all expenditures, the Federal Programs Section accumulates the paid invoices and bills the Federal Highway Administration for its share through a computerized billing system. (Typically, the Federal share on most projects is 80%, but it may vary.)

It is also the responsibility of this office to administer the annual Federal Highway Program (FY 2000 - \$156 million). The Assistant Administrator assigns the appropriate category of Federal funding and the corresponding Federal-aid project number for each project that is listed on the annual Transportation Improvement Program (TIP).

Unit Objective

The goal of this section is to maximize the amount of Federal-aid dollars brought into the Department, so that it can efficiently and effectively improve the highway infrastructure for the taxpayers of the state.

Fiscal Year 2000 Accomplishments

- Performed 26 concurrent billings totaling \$131.1 million of Federal-aid reimbursement;
- Obligated \$158.8 million Federal-aid dollars for Federal highway infrastructure improvements and related activities;
- The Department has put forth a major effort in "Project Closeouts." In FY 2000, 75 Federal-aid project final vouchers were submitted to the Federal Highway Administration, a twofold increase from the previous fiscal year. The resulting de-obligation of over \$1.5 million Federal-aid dollars allowed the Department to fund additional projects in the Transportation Improvement Program (TIP);
- The staff is integrally involved with the creation and implementation of the new Financial Management and project tracking system;

- Streamlined the PR-1240 (project authorization form) process with FHWA. Projects can now be authorized, and charges accrued, and billed in one step;
- Streamlined the creation of the Labor Additive (overhead factor for payroll charges) calculation process. In the past, it would take several months to calculate the new rate. The rate is now calculated automatically at the beginning of the new fiscal year;
- Streamlined the Modified Project Agreement Process such that, all projects that are authorized as Federally Exempt projects, can be modified without having to provide voluminous backup documentation. This change has cut in half the amount of time that FHWA needs to process Modified Project Agreements, and allows the Department to draw the Federal funds in a more expedient manner;
- Obligated \$30 Million of Highway Funds to the I-195 Relocation Project as stated by the Transportation Improvement Program (TIP). The two year total of funds obligated to this project is \$50 Million;
- Encourage staff to take computer courses that are relevant to the job.

Fiscal Year 2001 Program

- Obligation of an anticipated \$156 million of Federal-aid funds;
- With the increase of available Federal-aid dollars, the Federal-aid billings should increase to approximately \$140 million;
- Use up to \$12 million in available soft match dollars, which will enable the Department to bill certain projects at 100% Federal share;
- Obligate \$30 million of highway funds for the I-195 Relocation Project;
- Implementation and testing of certain modules of the Financial Management and Project Tracking System;
- Estimate to close (Final Voucher) 100 Federal-aid projects that will “free up” (de-obligate) approximately \$2 million of Federal Obligation Authority that can be utilized for additional projects;
- Develop an indirect cost center rate, and cost allocation plan under the federal guidelines as stated under OMB Circular A-87;
- Begin initial implementation of GASB-34 Asset Valuation Program;



Work is underway on South Water Street in Providence as part of the I-195 Relocation Project.

- Implement new account structure for the Highway Fund which will clearly show where the funds of the Department are coming from (ie.: Federal Funds, State Funds, Gas Tax, Third Party Funds, Soft Match, etc.) Currently, there are over 40 Highway Fund accounts that are utilized, with no simple way to identify the type of funds that are used.

Fiscal Year 2002

- An anticipated \$156 million Federal-aid program;
- Federal-aid billings should exceed \$150 million;

- Soft match in excess of \$12 million will enable the Department to fund certain projects at 100% Federal share;
- Full implementation of the new Financial Management and Project Tracking System;
- Submit in excess of 125 Federal-aid project Final Vouchers, which will de-obligate unspent federal allotments. This will enable the Department to obligate the federal dollars to other projects;
- Complete automation of all manual Federal-Programs databases;
- Develop a records retention policy for Federal and Non-Federal Project Records. Currently, the Department has records dating back to the 1930's, which could be destroyed if a policy was in place.

Implementation of the Federal Electronic Signature System, which will enable the Department to submit, all project financial documentation in an electronic format. This will eliminate the need for filing paperwork, and will greatly expedite the approval process.



Route 138 in Jamestown is just one of the state highways that falls under the jurisdiction of the Operations Division.

The Rhode Island Department of Transportation, Operations Division is responsible for operation of the State Highway System. This system includes 1108 miles of State Highway, throughout Rhode Island's 39 cities and towns. The Operations Division includes six functional areas: Construction, Final Review, Highway Maintenance, Materials, Survey, and the Transportation Management Center.

Construction

The Construction Operations Section is responsible for the management of road and bridge construction and rehabilitation contracts.

The Section is comprised of an administrative staff, housed on the first floor of Two Capitol Hill, and a field staff, assigned to on-site field offices throughout the state.

The administrative staff consists of a Section Administrator, three District Managers, an Electrical Unit, Technical Support Unit, and Office Staff.

The Section Administrator is responsible for managing the Construction Operations Section. He reports directly to the Chief Engineer of Operations.

The District Managers and the Electrical Manager are responsible for managing the construction operations for each of three districts and a statewide Electrical Unit. The District Managers and Electrical Manager report directly to the Section Administrator.

The Technical Support Manager manages a staff responsible for support services. This person answers directly to the Section Administrator.

2000 Programs

Contract Time Determinations (CTD)

The Department's past practice of sometimes setting an unrealistically short completion date for a construction contract and then trying to achieve it, often puts RIDOT at odds with contractors for setting an unreasonable pace of work, and disappointed the citizens/merchants/motorists, by providing false contract completion dates. The Department was plagued with contractor claims, project time extension requests, and cash flow problems. To remedy this problem, a new policy was established, requiring the Construction Section to perform Contract Time Determinations (CTDs) on all projects before a project completion date could be set.

Constructability Team

This team reviews each project with the design project engineer and the construction resident engineer to reduce the potential change orders on the project. This review not only determines if the project is buildable, but whether or not it adds to existing traffic constraints.

Training

The section has increased its in-house training programs with a concentration in the areas of concrete construction and asphalt pavements. The initial goal of this program is to establish specialized units to aid in the inspection of work in these areas.

Output Measures

Under the current administration the Construction Section has instituted a revised set of procedures for the approval of Change Orders (the mechanism which modifies the cost of a project).

As a result of this action, the percent of increase to contract costs is now better controlled.

2000 Construction Projects

The Department's calendar year 2000 program addressed the following projects organized by management districts:

District 1

Projects Substantially Completed

- Rehabilitation of Court Street Bridge, Woonsocket;

- Reconstruction of Kenyon Shannock River Bridge, Charlestown;
- Rehabilitation of J. Russo Memorial Bridge, Lincoln & Cumberland;
- Replacement of Woonasquatucket River Bridge, Smithfield;
- Replacement of Ponagansett Bridge, Scituate;
- Resurfacing of Route 295 (Contract 2), Smithfield & Johnston;
- Resurfacing of Routes 5, 7 and 146, Smithfield, N. Smithfield & Burrillville;
- Slater Memorial Park Bikeway, Pawtucket;
- County Road, Landscaping, Barrington;
- Resurfacing Lonsdale Avenue, Cumberland;
- Resurfacing Twin River Road, Albion Rd & Great Rd, Lincoln & Smithfield;
- Resurfacing Tunk Hill Road, Scituate;
- Post Road Landscaping, Warwick;
- Resurface Elder Ballou Road, Woonsocket & Cumberland;
- Statewide Crack Sealing;
- Statewide Chip Seal;
- Statewide Nova Chip.

Projects Underway

- Route 44 Resurfacing, Glocester;
- Colt State Park Restoration, Bristol;
- Interim Repairs Sakonnet River Bridge, Portsmouth & Tiverton;

- ADA Improvements, Charles Street and New London Avenue, Cranston & North Providence;
- Blackstone River Bikeway (Segment 6), Cumberland & Lincoln;
- Restoration of Moffit Mill, Lincoln.

Projects Awarded in 2000 with Work to Commence in 2001

- Reconstruction of Cranston Viaduct, Cranston;
- I-95 Gateway Contract 2, Cranston;
- Statewide Crack Sealing.

District 2

Projects Completed

- Route 6/10 Resurfacing, Providence;
- Route I-195 Resurfacing, East Providence;
- Statewide Pavement Striping;
- Broad Street, Providence;
- Smith Street Pedestrian Crossing, Providence;
- Atwood Avenue, Killingly Street, Greenville Avenue & Cherry Hill Road, Johnston;
- Phenix Avenue Reconstruction/Bridge Replacement, Cranston;
- Ferry Road, Bristol;
- ADA Improvements to Memorial Boulevard, Newport & Middletown;

- Wakefield Street, West Warwick;
- Restoration, Resurfacing and Rehabilitation, Post Road, Warwick;
- Washington Secondary Bicycle Path, West Warwick;
- Point Street Bridge Painting, Providence.

Ongoing Projects

- Newport Marine Facilities, Newport;
- South Water Street, Providence;
- Route 10 Huntington Overpass, Providence & Cranston;
- I-95 Safety Improvements, Pawtucket;
- Manton Village Bridge, Providence;
- Six Corners Bridge, East Providence;
- I-195 Interim Bridge Shoring, Providence;
- Warwick Station Site Remediation, Warwick;
- Arctic Circulator, West Warwick;
- Roger Williams Railroad Bridge, Providence;
- Gansett Avenue Bridge, Cranston;
- Bald Hill Road Improvements, Warwick;
- Reservoir Avenue, Cranston;
- Main Street Railroad Bridge, West Warwick;
- Allens Avenue, Providence.

District 3

Projects Substantially Completed

- Memorial Boulevard and Francis Street, Providence;
- Civic Center Interchange (Ramp RV-AD & AC/AD Widening), Providence;
- South County Bike Path Landscape, South Kingstown;
- Highway Safety Improvements to Route 108, South Kingstown.

Ongoing Projects

- Project-wide Landscaping, Providence Place Mall Ramp, Providence;
- Potter Hill Road Bridge #52, Westerly;
- Potter Pond Channel Bridge #373, South Kingstown;
- Hunts River Railroad Bridge #7, North Kingstown;
- Intersection Improvement, Route 1/Route 78/Airport Road, Westerly.

Electrical Unit

Projects Substantially Completed

- Traffic Signal (Contract 2b) West Bay, Statewide;
- Route 114 Traffic Improvements, Bristol, Warren & Middletown;

- Statewide Traffic Signals, Charlestown, Westerly, Warwick & East Providence;
- Traffic Signal Modifications, Statewide;
- Apponaug 4 Corners-Intersection Reconstruction, Warwick.

Ongoing Projects

- America's Cup Avenue, Newport;
- Traffic Signals on Route 108, Narragansett;
- I-95 Monitoring Stations;
- West Main Road at Stringham Road, Portsmouth;
- Woonsocket Municipal Signals, Woonsocket;
- Route 78 at Route 1, Westerly.

Final Review

The Final Review Section is a multi-functional unit that has been expanded to include: review of records, monitoring and inspection efforts, winter training and supportive services to other sections.

This Section is responsible for review and verification of quantities of all contract items and to ascertain the validity of payment of certain entries based on standard specifications and the special provisions of each contract.

In addition, this section is responsible for the monitoring and inspection of Federal Aid Highway Projects in accordance to the Internal Oversight Agreement with the Federal Highway Administration.

These efforts are accomplished by:

- The monitoring and inspection of construction projects to ascertain adherence or compliance to established state and federal standards and guidelines.
- Coordination with other RIDOT sections and personnel in order to develop procedures and programs, which will result in more effective and efficient methods and procedures.
- Establishment of procedures to insure the uniformity and consistency in the application of methods, specifications, interpretations and compliance to the *Rhode Island Standard Specifications*, *RIDOT Procedures for Uniform Record Keeping* and the *Manual on Uniform Traffic Control Devices*.
- Following up on previous review findings and recommendations relative to reviewers' findings, inspection findings, safety reviews, or other issues.



One of the 115 heavy dump trucks of the RIDOT Maintenance fleet.

Work Zone Safety Patrol

- This section developed modified procedures and guidelines to improve the efficiency and effectiveness of the Work Zone Traffic Control Safety Patrol. Changes have resulted in increased response time, more coverage and significant savings in cellular telephone usage.
- Seven staff members were certified as Work Zone Traffic Control Supervisors by the *American Traffic Safety Services Association* (ATSSA).
- Members of the Work Zone Safety Patrol have trained nearly all personnel of the Construction, Maintenance, Materials and

Survey Sections in the *Standards and Guidelines of Work Zone Traffic Control Devices*.

- The Work Zone Safety Patrol has continued to monitor all work zone control on consulting engineers' fieldwork. The efforts of the Work Zone Safety Patrol have contributed significantly to the quality of work zone traffic control in Rhode Island.

Maintenance

Governor Almond has made a commitment to maintain the highway infrastructure by redirecting spending to activities that preserve our roads and bridges. One of the important activities that preserves highway pavement is to prevent water intrusion into the pavement structure. We have expanded our pavement maintenance program to include chip sealing, micro-surfacing, along with increased crack sealing.

In addition to filling vacancies, we have programmed \$2.3 million per year for the replacement of equipment. During the past two years, we have been able to purchase:

- Seventeen arrow-boards
- Three trailers
- One 45-foot man lift
- Five mason dumps

- One welding truck
- Nine air compressors
- Three Bobcats
- Two sedan automobiles
- One bucket truck
- Twenty-four pickup trucks
- Twenty-five heavy dump trucks
- Four Bridge inspection vans
- One flood pump
- Six stake-body trucks
- Three catch basin cleaners
- One welding truck
- Twenty-four bin sanders
- Three small sanders
- Two small plows
- Three vans to transport inmate litter crews
- Six SUVs

The increased emphasis on improving the aesthetics of the state's roadsides has continued. To this end, we have taken the following actions:

- The Division, following two years of a federally funded program for sweeping the interstate system, let a two-year state funded contract continue the efforts.
- We have continued our anti-litter program, working cooperatively with the Department of Corrections, which has added additional crews. This was made possible when additional funding became available to reimburse the cost of crews

and to purchase additional vans to transport inmate work crews. Crews are now working even on weekends.

- We have awarded a contract to spray roadsides to rid the highways of weeds, vegetation, and also utilize a DOT Maintenance crew to address complaints and touch up smaller areas.
- During the past year, we have continued to direct extra resources to our interstate system. As a result, we have cleared the slopes and roadsides of ugly vegetation. Some of the areas had not been addressed since the interstate highways were built. Most areas of urban interstate have been cleared. Our focus is now the maintenance of cleared areas and increased efforts on other road systems. Clearing is evident on other primary and



State Maintenance crews in action while plowing on Route 295 North.

even secondary systems, including such roads as Route 1 (South Kingstown), Route 2 (East Greenwich), and other areas around the state.

- We are now in the process of acquiring equipment and chemicals with which we will initiate on a trial basis an anti-icing program for this coming winter season. The interstate highway system has been chosen for this program, since it bears the highest daily traffic volume.

Output Measures:

Calendar year 2000 efforts resulted in the following accomplishments:

- Bridge Inspectors performed 477 bridge inspections, plus inspection of an additional 13 structures less than 20 feet in length during the year.
- Sign crews installed 3,526 signs.
- 2426.3 miles of highways were swept.
- 432 miles of sidewalks were swept.
- 282 miles of brush were cut.
- 3,418.26 miles of litter was removed.
- 3,743 miles of roadsides were mowed.
- Approximately 17,303 potholes were repaired.
- 28,507 feet of drainage ditches were cleaned.
- 20,680 feet of drainage lines were cleaned.

- 2,703 catch basins were cleaned.
- 263 catch basins were repaired.
- 2,648 miles of highway were swept and \$247,316.89 was expended under RIC 2000-CM-36.
- 23,100 linear feet were installed and \$398,872 expended to repair/replace fencing under RIC 9842.
- 10,756 linear feet were installed and \$329,082.88 expended to repair/replace guardrail under RIC 9950.
- \$242,441.15 was expended to repair/replace attenuators under RIC 9951.

Materials

The Materials Section is responsible for the materials sampling and testing program which includes: specification review, acceptance testing, process control testing, independent testing program, certificates of compliance, and computerization of results.

The Materials Section is also responsible for material testing, design of materials and implementation of the use of materials in construction projects.



Joe Brown of RIDOT Materials mixes cement for testing that will be used on a bridge project.

In addition, the following activities are also undertaken:

- Design and evaluation of all portland cement and bituminous concrete mix designs.
- Investigations of construction and field, design problems and failures.
- Preliminary Engineering and Final Construction Coring.
- Coordination of FHWA Inspection Program.
- Soil/Aggregate Reviews.
- Provide Field Inspection and Design Recommendations concerning Subsurface Exploration Projects.
- Questionnaires related to Materials Engineering.
- Materials training as needed to other divisions.
- Other related duties as required.

Work-related committee involvement:

- AASHTO - Subcommittee on Materials
- NESMEA - New England States Materials Engineers Association
- Strategic Highway Research Program (SHRP) - State Coordinator/ Implementation Engineer - SUPERPAVE
- AASHTO - NTPEP - National Transportation Product Evaluation Program
- NPHQ - National Partnership for Highway Quality, formerly the National Quality Initiative
- NETTCP - New England Transportation Technician Certification Program
- NECEPT - Northeast Center for Excellence in Pavement Technology
- Transportation Research Board (TRB) Concrete Committee
- Departmental committees as needed

Number of Central Laboratory Samples Received:	
1997	2363
1998	3605
1999	3778
2000	3851

1997	2363
1998	3605
1999	3778
2000	3851

Number of Tests Performed:	
1999	25,121
2000	55,789

1999	25,121
2000	55,789

In the last few years we have experienced the positive effects of TEA-21 and an increase in the amount of work that we monitored.

From review of the Independent Assurance testing for plants 82% of the concrete and 81% of the asphalt testing was in tolerance. Upon subsequent review all testing was found to be in compliance with the specifications.

Amount of Concrete Produced (in yards):		Amount of Asphalt Produced (in tons):	
1997	9,730	1997	197,400
1998	18,297	1998	456,600
1999	25,588	1999	300,665
2000	22,930	2000	306,860

The coring crew cored 588 cores in 2000: 292 preliminary engineering cores, 118 final cores, and 178 special project cores (i.e. shotcrete/floating dock acceptance, research, density or other failures, dispute resolution, investigations, etc.)

We continued our work on plan reviews, certificates of conformance for projects and on the two specifications and procedures committees.

Calendar Year 2000 Accomplishments:

- *AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) ACCREDITATION PROGRAM* - Received AASHTO Accreditation for the year to June 30, 2001. Accreditation requires participating in laboratory inspections, round robin testing, and documentation of laboratory policies, organization, calibrations, proficiency, etc. Accreditation by AASHTO is required by Federal Regulations.
- *AASHTO SUBCOMMITTEE ON MATERIALS (ASOM)* - Many of our RIDOT specifications are directly related to the AASHTO Materials Specifications. Worked on the 20th (published in 2000) and 21st edition (to be published in 2001) of the AASHTO Subcommittee on Materials Specification and Test Standards. The Chief of Materials is the Vice-Chair of the Subcommittee for Region I and also has been appointed as the ASOM liaison on the *National Partnership for Highway Quality* (NPHQ). Work on this committee is critical to ensure our specifications are complete and meet our needs. During the

past year we have chaired task forces on Strategic Planning of the Subcommittee on Nuclear Testing of Materials and chaired Technical Section on Hydraulic Cements and Lime. Work on the nuclear testing standard by Mr. Jan Bak of Materials resulted in a new, recently approved AASHTO Standard.

- *STANDARD SPECIFICATIONS* - Submitted materials section revisions to the standard specifications.
- *NEW FEDERAL MANDATE FOR QUALIFIED TECHNICIANS* - In 1999/2000 we devised a program for qualification of technicians and began to qualify them. All were qualified by the Federal Deadline of June 30, 2000.

We also worked on task forces related to the New England Transportation Technician Certification Program (NETTCP). Received a National Partnership for Highway Quality (NPHQ) Gold Award in the Breaking of the Mold category at the Annual Meeting in Dallas, Texas in November 2000. Mr. Wendall Flanders, P.E. nominated, and Mr. Bak accepted, the award on behalf of the Department.

- NEW FEDERAL MANDATE FOR QUALIFIED LABORATORIES - In 1999/2000 we devised a program for qualification of laboratories and began to qualify them. All field laboratories were qualified before the federal deadline of June 30, 2000.
- SAFETY - Updated our Emergency Contingency Plan and continued our internal safety committee work on creating a safer working environment.
- HIGHWAY ASSESSMENT COMMITTEE - Continued maintenance for the Crack Seal project and developed specification and issued contract documents for 2001 applications of the Surface Seal project.
- HIGH PERFORMANCE CONCRETE (HPC) - Used HPC for the first time on state bridges.
- FREIGHT RAIL IMPROVEMENT PROJECT (FRIP) - Monitored and reviewed design process; initial discussions on quality assurance contract and construction practices; conduct on-site evaluation of current conditions (coring crew - rebar locations).



Mike Foisey of Materials is weighing a sample of cement to determine its chemical composition.

- TRAFFIC MARKINGS - Use of reflectometer to evaluate markings for current reflectivity values and thickness for new contracts.
- ASPHALT PAVEMENTS:
 - Contracted and placed a vulcanized asphalt rubber mixture on a project.
 - Finished SUPERPAVE specification.
 - Awarded a \$108,000 project to evaluate asphalt overlays.
 - Implemented the use of a Direct Tension apparatus for asphalt binders.
 - Acquired a "new" Pine Gyratory under a research grant.
 - Continued to evaluate all asphalt produced mixes under SuperPave guidelines.

- Partnering with J.H. Lynch - Cumberland to develop a SuperPave design laboratory. Developing a specification for modified - rubber asphalt binders.
- Evaluating the effects of fines on asphalt binder.
- Conducted a freeze-thaw evaluation of asphalt to evaluate stripping.
- STATE EMPLOYEES CHARITABLE APPEAL (SECA) - Mr. John Martucci and Mr. Paul Carrier received Governor's Citations for Exceptional Effort and Commitment to the 1999 Campaign (only three given statewide). They helped the campaign as Ambassador Assistants (the only two in the state). They also performed this work for the 1998 Campaign. Mr. Mark Felag was recognized for work on the SECA State Advisory Committee.

Additional Accomplishments:

- Worked on Cement Technologies Task Force in the area of blended cements.
- Worked on a Cement Course with Federal Highway Administration.
- Held first NETTCP Hot-Mix Asphalt course for RI State Employees.
- Became an American Concrete Institute sponsoring agency for certification.
- Monitoring floating dock work for Newport Project in North Carolina.

- Provided concrete cores for National Institute of Standards and Technology (NIST) for their research.
- Toured the NIST facilities and discussed ways to extend the life of concrete.
- Reviewed and forwarded comments on Standard Specifications.
- Received radiation license from the Department of Health, which expires August 31, 2005.
- Worked as technical monitors on various departmental projects.
- Contracted to study of Mt. Hope Bridge Deck resulting in a reassessment of repair.
- Added three additional aggregate sources in a winter analysis database.
- Oversaw the forensic evaluation study conducted in partnership with Brown University of the steel incorporated in the Washington Bridge.
- Conducted research regarding Alkali-Silica Reactivity on regional aggregates.
- Conducted chloride determination as part of forensic evaluation of bridge and road structures.
- Completed a Soil-Gyratory compaction research project.
- Became an American Concrete Institute (ACI) Sponsoring group - the only one in Rhode Island - able to certify public and private sector technicians in five different ACI certifications. Presently have certified 20 engineering technicians, at a great savings to the state.

Survey

The Survey Section is responsible for providing precise survey and statewide construction stakeouts for construction projects. This section provides the research, fieldwork and computation necessary to produce the finished plan and/or deed description. This section is also in charge of disseminating survey information pertaining to highway plats, field books, legal descriptions, and geodetic control data to professional land surveyors, civil engineers, and the public. Records are available to all private surveyors in the state.

Major Milestones - FY 2000

The Survey Section coordinated a Global Positioning System (GPS) survey of the Federal Base Network (FBN) and Cooperative Base Network (CBN) stations to improve the accuracy of the vertical component and establish spatial reference control in accordance with federal standards and specifications.

This major effort involved federal, state and private surveyors. In Rhode Island, 16 CBN stations were observed by eight different organizations. The National Geodetic Survey (NGS) observed one FBN station. The results will benefit all surveyors working within Rhode Island.



A Survey crew in action.

Training is important to keep staff up-to-date with advances in technology and applications and enables them to develop technical expertise needed to maintain a highly qualified and motivated work force. During 2000, the following classes were held: The AutoCAD 2000 Level I; and Introduction to Land Development Desktop I, II

New technology is becoming available to the survey field. A major advance is the use of satellite signals to very accurately locate points on the surface of the earth, also known as GPS. Use of this equipment increases the accuracy of surveys and reduces time required. GPS will also allow the accurate location of highway equipment and facilities (highway lights, drains, signals). The Survey Section has initiated purchase of this new generation equipment. Bids will be opened early in 2001. Delivery is expected in Spring 2001.



Images captured through TMC technology can help RIDOT to better manage traffic.

Transportation Management Center (TMC)

The Rhode Island Department of Transportation continues to invest in Intelligent Transportation Systems (ITS) to manage increased congestion, improve roadway safety, and improve air quality.

In February 1998, RIDOT completed the construction of the Transportation Management Center (TMC). In 1999, we signed a contract for technical and operational support services. For two years, this professional services support contract has provided staff to support TMC operations. The on-site staff are under the direction of state-supported staff. The firm has provided ITS analysis, developed training materials, and provided technical support related to system integrity.

Variable Message Systems (VMS)

RIDOT is in the process of upgrading the software for the eight portable variable message boards centrally controlled at the RIDOT TMC. These signs will be moved to locations determined to require advanced motorist information processing, as soon as the 13 overhead permanent dynamic message boards currently out to bid are installed and operating (anticipated to be a two year process).

The variable message boards are part of an entire system that will include a combination of overhead permanent changeable signs and the eight portable changeable signs. All of the boards will be connected to a central controller in the TMC. The overhead permanent boards will be installed on overhead trusses. The ability to instantly change messages eliminates the need for RIDOT personnel to drive to the site of a board to change a message. The graphic capabilities also enable the RIDOT to display universal messages to accommodate the ever-increasing diversity of traffic now using Rhode Island highways.

RIDOT is presently working with both the Connecticut DOT and Massachusetts DOT through the I-95 Corridor Coalition to study the sharing of VMS across state borders, since the effect of traffic crossing borders prompts a cooperative action.

Highway Advisory Radio (HAR)

RIDOT's TMC personnel successfully operate four permanent highway advisory radio transmitters on I-95 North, I-95 South, I-95 at I-195, and I-295 at RI-146. The transmitters allow RIDOT to broadcast messages on frequency 1610 AM within a three mile radius. The transmitters can handle multiple messages, can be sequentially timed, and most importantly, can be activated remotely. Plans are ongoing to add to the complement of radios. The solar max portable radio is deployed during special events. The build-out of the HAR system is anticipated to provide statewide coverage.

Closed Circuit Video Transmissions (CCVT)

RIDOT has installed 22 closed circuit video transmission (CCVT) cameras that are presently in testing and evaluation. These cameras are being installed on I-95, I-195, and RI-10. An additional three cameras are installed on the Improved Ramp Project in the Memorial Boulevard section of Providence. The three added cameras will interface with the 22-camera system. Work continues on integrating the three cameras deployed to manage traffic around the Providence Place Mall. In addition, another three cameras are being deployed at the Pawtucket S-Curve on I-95 due to the high rate of accidents occurring in this area.

It is expected that these cameras will be integrated into the system in the Spring 2001.

The camera system RIDOT is deploying is unique in that it is incorporating software called “Traffic Vision” developed by a Rhode Island based company, NESTOR. The software enables the RIDOT to use the cameras for surveillance, traffic counts and classification. This system eliminates the need for loop detectors in roadways where it is not feasible to maintain this type of detection equipment. RIDOT will, in the future, carefully evaluate camera locations and install this type of system where it is determined both RIDOT’s Traffic Section and the TMC will benefit. The three cameras being installed in the Providence downtown area further solidify RIDOT’s commitment to fully deploying ITS. These cameras will be interfaced with an upgraded signal system in that area enabling TMC operators to better manage traffic during peak traffic, special events, or unplanned incidents.

This inclusion of cameras on a highway project is one step the Department is taking to gradually develop a “Rhode Island Smart Highway System.”

Internet Web Site

RIDOT’s TMC has developed an interactive Internet web site that will deliver real time traffic information, including real time

snapshots from the CCVT. This effort is being designed concurrently with the CCVT design and deployment. Rhode Island commuters will be able to access the web site and view roadway conditions from their homes and offices, allowing them to plan their commute accordingly.

Arterial Signal Systems

The Department is designing signal upgrades throughout the state. The upgrades are intended to synchronize signals and interface the signal controllers with the TMC. Operators will then be able to, based on pre-planned diversionary routes and pre-planned timing schedules, control the signals from the Center during major congestion, caused by special events or incidents.

The cameras located at either these high capacity intersections, or on the Interstate, as previously noted, will ensure the effectiveness of our overall ITS statewide plan. Upgraded signals that are on primary routes may be managed from the TMC by operators who can take control of the signals to eliminate the “stop and go” that contributes to increased traffic congestion during incidents. Diversionary routes, such as Bald Hill Road, Warwick will also have enhanced arterial signal systems, coupled with camera surveillance that will link back to the TMC.

There are no plans at this time, however, to develop a smart system to set timings based on actual traffic conditions. The potential to mitigate congestion due to incident diversions is great and is an ongoing TMC recommendation.

Other Activities

The early deployment initiatives prompted by the previous federal administration have resulted in several software products that are now available to be used in all state TMCs (or similar facilities). The TMC is working with Arizona DOT to bring the roadway closure restriction system technology to RIDOT to be used by several stakeholders, such as the Rhode Island State Police and the RIDOT Construction Section, in managing construction schedules and providing timely information to the motoring public. In addition, RIDOT is working with the Rhode Island State Police to enhance the presence of the State Police in the Center in order to perfect the virtual barracks initiative that is currently underway.

The *RhodeWatcher* program is presently producing maximum benefits in identifying incidents and other problems on the roadways traveled by these volunteers; however, RIDOT has not decided whether or not to expand this program. Plans are also underway to explore the viability of using radar detection equipment for counting purposes and for early warning detection. The use of cameras for both

counting and classification may not be the appropriate technology as the program expands. A request for proposals (RFP) is being developed to secure the services of a communications and IT expert and/or multi-faceted consultant firm that could enable the TMC to avail these services as issues arise. Another RFP is also being developed to test the possibility of securing a “Joint Venture” initiative to add to the complement of cameras. The 511 initiative is presently

undergoing review at the national level, however, the recommendation by the TMC is to secure the 511 number to lock in the number for future use. While ITS will not alleviate all problems associated with an overburdened highway system, it can begin to provide motorists with real time highway information, so that they may make informed traveling decisions. ITS benefits are being realized throughout the country through reduced congestion, rapid accident reporting and response that saves lives, time and

money, data collection, and increased capacity of existing roadways. The TMC has spearheaded the development of a regional ITS Architecture. This plan will involve mass transit, economic development, police and fire agencies, other state agencies, commercial vehicle operators, the local media, airport and bridge authorities to identify communication needs in order to best leverage resources, while improving the efficiency of Rhode Island’s transportation system.

design DIVISION

Highway Engineering

The Highway Engineering Section is responsible for the preparation of engineering plans, specifications and estimates for the construction and reconstruction of Rhode Island’s state-owned and maintained highways, and bicycle and pedestrian paths. This work also involves coordination with the Rhode Island Department of Environmental Management, the Rhode Island Coastal Resources Management Council, the Rhode Island Historical Preservation Commission, all 39 cities and towns, and various citizen advocacy groups.

The Highway Engineering Section coordinates with various Federal agencies, notably the Federal Highway Administration,

the Army Corps of Engineers, the U.S. Coast Guard and the U.S. Environmental Protection Agency. The Highway Engineering Section is also responsible for the review of Utility Permits, Land Sale Requests and Physical Alteration Permit Applications (PAPA).

In addition to day-to-day management of over 75 active engineering design contracts, including the massive I-195 Relocation and Relocated Route 403 Quonset Point/Davisville (QPD) contracts, the Highway Engineering Section successfully advertised and opened bids for 32 projects with an amount of over \$67,206,000 in total construction costs. For 2000, this office also processed 132 PAPA and reviewed 67 Land Sale requests.

Major Accomplishments

- Relocated Route 403 (Post Road Interchange), North Kingstown –
2 contracts \$23,809,000
- I-95 Safety Improvements (Road/Bridge)
\$10,966,000
- I-195 Building Demolition (C-1)
\$ 245,000
- I-95 Service Roads/Bridges
\$ 7,100,000
- Resurfacing Projects, Statewide –
4 contracts \$ 2,940,000
- Resurfacing Projects, Statewide –
6 contracts \$ 4,260,000
- Drainage Maintenance Projects
Statewide – 2 contracts \$ 575,000
- Stormdrain Retrofit (Stafford Pond),
Tiverton \$ 244,000

- Bald Hill Road Reconstruction, Warwick
\$ 7,789,000
- Blackstone Bikeway, Cumberland and Lincoln
\$ 3,700,000
- Ten Mile River Greenway Bike Path, Pawtucket
\$ 430,000
- Allens Avenue (Demo), Providence
\$ 1,240,000
- I-195 Resurfacing Improvements
\$ 1,136,000
- Mount Hope Bridge Approach, Bristol
\$ 631,000
- Charles Street ADA/Marieville Enhancement, North Providence
\$ 1,482,000
- Apponaug Intersection, Warwick
\$ 659,000

In addition to the above, we completed review of proposals and consultant selection for seven new Highway Engineering projects, and contracts have been signed. For four other new engineering projects, we are currently working through the selection process.

Included in the above is the Plan Library Archival Numbering System (PLANS) contract, which involves the technological modernization of our Plan Room. All of RIDOT's existing construction plans and condemnation plats will be scanned (70,000

sheets), and a dynamic index created for each scanned image. It will also provide a comprehensive retrieval system for all plan and plat information, and develop a database with a management system for all newly created material.

Also in 2000, two more of the Highway Engineering Unit's staff engineers passed the Professional Engineers Exam. This brings us to a total of nine Registered Professional Engineers out of 17 positions.

Bridge

The Bridge Engineering Section is responsible for the development and supervision of the engineering/design of Rhode Island Highway Bridges. There are more than 250 bridges presently in various stages of design. These bridges are either stand-alone contracts or are to be constructed as part of highway projects.

The work involves coordination with the Consultants and the following agencies: Federal Highway Administration, U.S. Coast Guard, the Historic Preservation Commission, Army Corps of Engineers, Rhode Island Coastal Resources Management Council and the Rhode Island Department of Environmental Management.



The Potter Pond Channel Bridge in South Kingstown is scheduled for replacement, but will remain open to traffic until September 2001.

The following bridge projects amounting to \$53 million were advertised for construction in 2000.

1. Ramp Bridge No. 736 & Wilbur No. 420
2. Manton Avenue No. 78
3. I-95 Service Roads
4. Main Street Railroad Bridge No. 279
5. I-95 Safety Improvements
6. Sakonnet River Railroad Bridge No. 250
7. Potter Pond Channel Bridge No. 373
8. Blackstone River Bike Path
9. I-195 Interim Shoring
10. Third Track Garnet Street No. 833
11. Potter Hill Road Bridge No. 52
12. Hunts River Bridge No. 7
13. Cranston Street Bridges 924 & 453

In addition, the Bridge Section continued with the development of plans for the Washington Bridge No. 200, Barrington and Warren Bridges, Sakonnet River Bridge and the bridges on Interstate 95, 195 and Interstate 295, also I-195 Relocation and the Quonset Point/Davisville Highway System and their bridges.

The FRIP (Freight Rail Improvement Program) which consists of modifications or replacement of many structures as well as numerous linear feet of walls and railroad tracks is proceeding as scheduled. These and several other bridge projects are scheduled for construction in 2001 and 2002.

The Bridge Section Engineers also review Overweight Vehicle Permits for the Registry of Motor Vehicles.

Traffic

The program to install smart, interconnected, closed-loop, traffic signal systems continues.

Construction has begun on the following arterials:

- Route 2, Warwick (14 Intersections)
- Route 108, South Kingstown (4 Intersections)
- Kennedy Plaza, Providence (4 Intersections)

This program enables RIDOT to control traffic signal timing from a central location in Providence. Objectives of the program are to promote greater response to traffic demand during off peak periods while enhancing congestion management during periods of heavy traffic volume.

The annual program for statewide pavement markings was also accomplished. Four projects were advertised for bids in 2000 (North/East Bay, Central, South, and Limited Access Highways). These projects are to continue the application of durable pavement markings (epoxy) on a statewide basis.

Also completed in 2000 was a Hazard Elimination project in the town of Portsmouth, at the intersection of Route 114 (West Main Road) at Stringham Road.

In order to meet obligations to the State Traffic Commission for installation of new traffic signals and modifications to existing traffic signals, electrical construction contracts are prepared. In 2000 a contract went to construction at eight locations in various areas of the state.

To meet obligations to the Federal Highway Administration, under the Highway Performance Monitoring System, yearly reporting of highway statistics must be submitted by June 15th of each year.

In order to insure this reporting is done in a timely way, the Traffic & Safety Management Section has been conducting a program of placing remote traffic monitoring stations. In 2000, 20 remote stations were constructed. These were a mixture of Weight-In-Motion, Traffic Volume, and Speed Monitoring Stations.

In 2000, the Pavement Management Team performed inspection and computer analysis. This work, which is aided by bi-annual video logging of our highways, produces yearly pavement condition reports, and makes recommendations on treatments which can extend the service life of existing roadway surfaces.

In 2000 the Electronic Accident Reporting System (EARS) was first deployed to a number of law enforcement agencies in the state. When fully deployed, reporting of accidents on paper forms will be eliminated in favor of a statewide electronic reporting system.

Future planning in the Traffic & Safety Management Section includes:

- Selection of additional routes for expansion of the arterial, closed-loop system network.
- Continuing the rehabilitation of major destination signing on all limited access highways.

- Additional Hazard Elimination projects at selected intersections.
- Continued statewide pavement marking applications using durable material.
- Video logging of the highway system for use in Pavement Management.
- Further addition of remote stations for traffic monitoring.

Office of Environmental Programs

The Office of Environmental Programs, consisting of the Landscape Architectural, Cultural Resources and Natural Resource Units, is directly responsible for all the coordination of the environmental aspects of projects. This work includes coordination with the Rhode Island Department of Environmental Management, the Rhode Island Coastal Resources Management Council, the Rhode Island Historical Preservation and Heritage Commission, and various federal agencies, such as Federal Highway Administration, the Army Corps of Engineers, the U.S. Coast Guard, and the U.S. Environmental Protection Agency.

The Office of Environmental Programs acts as project managers for separate landscape, scenic roadways and historical restoration contracts, and serves as staff support to the Scenic Roadways Board. The Office of Environmental Programs also reviews Utility

Permits, Land Sales Requests and Physical Alteration Permit Applications for landscape, scenic roadways and historical issues.

The Office of Environmental Programs successfully advertised and bid opened seven projects with an amount of \$ 1,875,000 in total construction costs.

The following environmental projects were advertised for bid in 2000:

- County Rd Landscaping, Barrington \$280,000
- Post Rd (Airport) Landscaping, Warwick \$313,000
- Route 10 Landscaping, Providence and Cranston \$331,000



Lincoln's Moffitt Mill, built in 1812, is one of the first machine shops constructed in Rhode Island, and it is slated for historic preservation and restoration.

- Statewide Bulb and Wildflower Contract 2 \$75,000
- Southern RI Landscape Maintenance Contract (Kingston Station, Wakefield Cutoff and Route 138 Jamestown) \$348,000
- Restoration of Colt State Park Entrance, Bristol \$235,000
- Restoration of Moffitt Mill, Lincoln \$292,000

Research and Technology Development

The Research and Technology Development (R&TD) Section has primary Departmental responsibility for scientific and engineering research, product evaluation and technology transfer, engineering review of prospective highway and bridge projects, and geotechnical review and consultation on subsurface foundation design and environmental contamination issues.

The section also, at the request of the Chief Engineer, undertakes certain additional projects that require specialized experience.

Research Program

The section administers all aspects of the RIDOT research program. It has organized a RIDOT Research Advisory Committee (RRAC), composed of members from this and other RIDOT sections.

Through the RRAC, the section coordinates recommendations for the selection of research topics and the appointment of a technical panel to monitor the progress of each research project.

In conjunction with the technical panel, the section monitors the progress of the work and, at its conclusion, makes recommendations for the implementation of the research findings. Research projects are carried out by R&TD or other RIDOT personnel or by the University of Rhode Island.

The section also is involved in regional and national research. The managing engineer of the section is chairman of the Advisory Committee of the New England Transportation Consortium (NETC).

Other members of the section, as well as personnel from other RIDOT sections, serve on NETC technical committees. National involvement includes membership on the American Association of State Highway and Transportation Officials (AASHTO) Research Advisory Committee and on the AASHTO Standing Committee on Research.

Through these memberships, the Department is an active participant in determining the direction of national research.

Product Evaluation

The Product Evaluation Unit of the section evaluates all new products, technologies, processes, and equipment for use on RIDOT construction projects and maintains a listing of approved products and vendors.

In coordination with the Construction Section, the Unit determines the disposition of contractor requests to use proprietary products on RIDOT projects and is included with the National Transportation Product Evaluation Program (NTPEP) with the section head as a member.

The Unit performs non-routine forensic analysis of various types of materials as needed and are also members of a regional paint/coating partnership, Northeast Protective Coating Committee (NEPCOAT), where paints and other coatings are evaluated.

The Unit serves as part of the technology information center of the Department, planning and organizing various workshops and seminars.

Engineering

The Engineering Unit provides technical support to the Design, Construction, and Maintenance Sections. It infuses new technologies, materials, and processes where possible into plans and specifications. Section engineers review the plans of all proposed highway and bridge construction projects, draft and review job-specific and standard specifications, and provide unique Departmental expertise in Portland cement concrete and asphalt pavement technology.

Geotechnical

The Geotechnical Unit performs the Department's primary geotechnical, geohydrologic, and subsurface environmental review of proposed projects. This includes assessment of structure foundation design as well as the review and assessment of soil and groundwater contamination issues. Section staff members have been instrumental in introducing geosynthetics, reinforced earth, and mechanically stabilized earth retaining wall technology to the Department.

Pavement Preservation

The section has been assigned the responsibility for the Department's pavement preservation program, which was approved by FHWA. A crack and surface sealing program is up and running and a thin overlay program has been initiated. Rubberized chip seal and paver placed surface treatment

projects have been successful and will continue in 2001. Many roads statewide have been surface treated. A Global Information System (GIS) program, Arcview, was incorporated to track the project and condition status of all state maintained roads.

The following crack and surface sealing projects were successfully completed in 2000:

- Crack Sealing, North & East Regions
\$158,879
- Crack Sealing, South & Central Regions
\$158,879
- Paver Placed Surface Treatment
\$1,063,066
- Rubberized Asphalt Chip Seal
\$942,898
- Microsurfacing
\$720,225
- Ongoing project 2000-2001 –
(Rout and Seal, Statewide)
\$229,635

Project Tracking

The Project Tracking Unit was formed in January 1998 and is in charge of the implementation of the Project Tracking System (PTS). It is responsible for documenting and mapping our current project development process and for updating our policies and procedures to reflect the present project development cycle.

The Unit accomplishes this by providing the following activities and services:

1. Developing and maintaining project development processes, procedures, and policies that are used for project planning, approval and design.
2. Providing technical expertise and assistance to the engineering staff.
3. Improving the quality and cost effectiveness of projects through the programmatic and early use of scheduling, constructability, and value analysis.
4. Providing training related to the project development, design, and management process, in an effort to enhance and improve RIDOT's engineering staff's technical expertise and deliver projects on time and on budget.

Unit Objectives

The Project Tracking Unit's mission is to provide the Engineering Division with the management technology to successfully implement RIDOT's Capital Improvement Program, and to provide RIDOT's Engineering Staff with the necessary training and technical expertise to deliver projects on time and on budget. The objectives of the Project Tracking Unit are:

1. To develop the computerized and fully integrated Department-wide Project Tracking System (PTS) for project

scheduling and management, that is fully integrated with the Financial Management and Executive Information Systems;

2. Design and implement project management, develop and implement a Work Breakdown Structure (WBS) and classification system, develop and implement an integrated document tracking system, and to recommend project funding levels;
3. To work closely with all functional units within the Department to ensure that projects are on schedule and within costs and other constraints;
4. Develop and monitor a long-term and fiscally constrained capital transportation program and to incorporate long-term programming into the state's transportation planning process;
5. Analyze available funding to ensure that program funding levels both at the program and at the project levels are consistent with Department resources;
6. Acquire computer hardware and software to accommodate the requirements of the Project Tracking System (PTS);
7. Work with other state agencies, consultants, and the Federal Highway Administration (FHWA), to plan the implementation of the PTS and ensure that the data provided to these agencies is compatible and meaningful;

8. Work with staff from all sections of the Department, i.e. Real Estate, Contract Administration, Construction, Civil Rights, Final Acceptance, etc. to streamline coordination and project management processes.

FY 1999 ACCOMPLISHMENTS:

The major accomplishment of the Project Tracking Unit in 1999 is the major update of our Engineer's Estimating program known as Quest. The Engineer's Estimate program was replaced during the last quarter of 1998 and was fully functional and implemented in 1999. In addition, the Unit has worked with the Chief Engineer and the Section Heads of the Engineering Division to define a new Work Breakdown Structure for our project development process.

FY 2000 PROGRAM:

The unit continued the development and implementation of the Project Tracking System (PTS); prepared the first draft of a Project Management Manual available for use by our engineering staff and the consulting community, and began revising and incorporating our Design Policy Memos, Memos to All Consultants, and Design Informational Memos so that they are in line with the Project Management Manual and the Project Tracking System.

FY 2001 PROGRAM:

The Unit's goal for the FY 2001 Program is to fully develop and implement the Project Tracking System, including the Project Management Manual, Design Procedural

Manual, and other necessary supporting documentation.

Once the systems is fully operational, the PTS Unit will be able to provide timely updates and projections on all projects. Another major goal for FY 2001 is to investigate the feasibility and implementation of electronic bidding.

OUTPUT MEASURES:

The Output Measures for the Project Tracking Unit cannot be effectively defined until the PTS is fully implemented. At that time, the effectiveness of the Unit can be measured based on the effectiveness of the Engineering Division to successfully implement RIDOT's Capital Improvement Program.

policy and planning **DIVISION**

The Policy & Planning Division consists of two sections: Transportation Systems Planning and Programming and Intermodal Project Planning. The Transportation Systems Planning and Programming Section is composed of three units: Capital Programming, Systems Planning Support, and Transportation Systems Planning. The Project Planning Section has three units: Rail/Bicycle, CMAQ/Enhancements/Water Transportation, and Community Affairs.

Capital Programming/Systems Planning Support Units

The Capital Programming and Systems Planning Support Units work hand in hand in developing and monitoring a fiscally responsible Capital Program which is delivered on time and within budget. The Capital Programming Unit is charged specifically with developing the Six Year Capital Transportation Improvement Program and Capital Budget for the Department.

The Unit works with Statewide Planning to develop and monitor the three-year State Transportation Improvement Program (TIP) and the long-range Ground Transportation Plan. In addition, the Capital Programming Unit is responsible for ensuring that the state's TIP remains within budget and complies with all air quality conformity requirements. The goal of the Unit is to develop and monitor the RIDOT Capital Transportation Program which best meets the transportation needs of the state's citizens and remains within the financial resources available to RIDOT.

A key product of the Capital Programming Unit is the Transportation Improvement Program (TIP). Through a cooperative effort with Statewide Planning, the new TIP was developed to allocate the funds coming to the State of Rhode Island from the Federal Highway Administration through the Transportation Equity Act for the Twenty-First Century (TEA21). This TIP focuses on projects designed to preserve and manage our existing transportation resources while providing funds for economically important new transportation projects including the Relocation of I-195, the Civic Center Ramp, the Quonset Access Road, and the Third Track projects.

The Systems Planning Support Unit monitors RIDOT capital projects to ensure that projects are consistent with our available financial resources. Strategies are developed for controlling project expenditures and managing state and federal capital funds to improve cash flow. Systems Planning Support also analyzes, develops, implements and manages projects to bring improved management methods and tools to RIDOT, including the development of a new Financial Management and Project Tracking System.

Capital Program/System Support Units Accomplishments:

- Succeeded in incorporating Department's interests into the Statewide Transportation Planning activities.
 - Initiated implementation of the Financial Management and Project Tracking System (FMPTS) which will result in the installation of a fully integrated financial management system within RIDOT.
 - Produced weekly and monthly reports on the financial position of the Department.
 - Managed the Highway Fund's cash flow in a fiscally responsible manner.
 - Worked closely with the Statewide Planning Program to develop and implement the public outreach meetings to solicit new projects for the TIP. Participated in the TAC review teams which evaluated the requested projects submitted by the various communities.
 - Conformity and project level air quality analysis on major projects such as the RI- 2/Sockanosset Crossroads Intersection, and the Niantic Avenue/ Cranston Street Interchange were completed as scheduled in cooperation with the Department of Environmental Management's (DEM) Air Resources Division and the Department of Administration/Division of Planning.
- Developed an electronic database of the Air Quality Conformity Forms for the projects recommended for the TIP and coordinated with DEM to obtain approval on the Air Quality Analysis required for each of these projects.
 - Worked with the Statewide Planning Program and the consultant and provided data for input into the updated Statewide Transportation demand model that was used to demonstrate air quality conformity of the new TIP.
 - Developed RIDOT's request of projects and recommended funding levels for categories of projects in the new TIP. Presented this information at a public hearing for the record.
 - Participated on the Governor's Growth Planning Council and its Steering Committee which has been changed to recommend ways of encouraging growth in economically and environmentally sound locations in the state.
 - Prepared applications and coordinated submissions for Discretionary Funding for the Bridge, Interstate Maintenance and PLH Categories which resulted in the state receiving \$16 million.

Transportation Systems Planning/ Financial Management Unit

The Transportation Systems Planning/Financial Management Unit provides for the various planning needs of the Department including long range planning, community planning, intermodal planning/programming activities, system performance monitoring, and financial management services for the Division.

Under long range planning, a major effort is corridor capacity preservation/access management. The Congestion Management System (CMS) Plan has identified presently congested as well as corridors with potential for congestion over the next 20 years. Coordinated efforts by staff, state and local municipalities will be required to minimize congestion in the identified corridors as well as to protect other corridors from receiving displaced congestion.

As municipalities update their comprehensive plans, the Unit will review the plans for circulation, land use and other factors that impact upon the transportation system. The Unit manages the Federal Transit Administration (FTA) program (planning, programming and financial management) for the state as well as the financial portion of the Local Rail Freight Assistance (Federal Railroad Administration) program. Activities include preparing the necessary

planning documents to assure access to grant funds, grant writing, quarterly progress and financial reporting, and grant closeout. The Unit also monitors the transit bond program that provides matching funds for the design and construction of facilities and the purchase of buses.

System performance monitoring includes periodic updates of the CMS plan, the Public Transportation Facilities and Equipment Management System (PTMS) plan, management of system integration and submission of annual Federal Highway Administration (FHWA) data reports.

Transportation Systems Planning Accomplishments:

- Completed the first Rhode Island Pedestrian Safety Plan. A brochure will be developed to synthesize the major elements of the plan in a format that is easily understood by the general public and local public officials.
- Coordinated with the Rhode Island Public Transit Authority (RIPTA) to develop the transit portion of the FY 2001- FY 2003 TIP. The transit component is fiscally constrained.
- Continued preliminary data collection for the update to the CMS.
- Updated the policies and procedures manual for managing the FTA program at RIDOT.

- Updated the Title VI Plan for the transit program in Rhode Island. This plan is a joint effort of RIDOT, Statewide Planning, and RIPTA.
- Submitted the annual planning and research data reports to the FHWA.
- Completed a Triennial and State Management Review by FTA of RIDOT and RIPTA management and administration of the FTA Program in Rhode Island.

Intermodal Project Planning Section

The Intermodal Transportation Planning Section develops and implements projects in the area of rail, water, and bicycle pedestrian transportation. This section is responsible for developing an integrated transportation system that provides convenient connections between all modes of transportation. In order to facilitate this objective, the Division has Rail, Bicycle, and Water Sections.

This Division is also responsible for the Transportation Enhancement Program, Air Quality Initiatives set forth under the Congestion Mitigation Air Quality Program and through the Community Affairs Office provides service support with public outreach programs within the Department.

Enhancement Program

Accomplishments:

- Implementation of Enhancement Projects continued in 2000, with an emphasis upon utilizing community based resources for design and construction wherever possible.
- During 2000, nearly \$3.1 million in design and construction authorizations occurred within the Enhancement Program, up from slightly over \$2 million in 1999, and just over \$500 in 1998. This substantial increase is directly attributable to increased emphasis on the use of community resources.
- In Spring 2000 the Department of Administration granted a delegation of authority for the Department to enter into agreement with non-profit agencies for non-profit based project implementation.
- In Fall 2000, Qualifications Based Consultant Selection procedures were developed and adopted for use by municipalities and non-profit agencies in accordance with Rhode Island General Law 45-55-8.1. This process is now firmly in place to guide customers of the Enhancement Program in consultant selection.
- A scope of work and Request for Proposals was developed to hire a liaison consultant to assist the Enhancement Program Managers in all aspects of program delivery.

Construction:

The following Enhancement Projects were under construction in 2000:

- Market Square Common in Woonsocket – Construction ongoing
- Memorial Park Walking Track in Johnston – Construction completed
- Slatersville Sidewalk Enhancements – Construction completed
- Centredale Roadway Enhancement/Route 116 Village Landscaping – Construction completed
- Foster Guardrail – Nearing completion
- Restoration of the Bull Gates at Colt State Park – Commenced in 2000
- Construction on the Central Falls Landing – Commenced late 2000



The Central Falls Landing is the first public docking system being built along the Blackstone River as part of the Blackstone Valley Navigation System.

- Construction Contract 1 for the Woonasquatucket River Greenway – Out to bid

- The Interstate Landscaping Enhancements – Bulbs planted
- Moffit Mill Restoration in Lincoln – Construction began
- Ten Mile River Greenway in Pawtucket – Commenced 2000
- Marieville Streetscape in North Providence – Commenced 2000

Design:

Engineering/Design process:

- Saugatucket River Walkway in South Kingstown – Final Design
- Woonsocket Depot Project – Preliminary to Final Design
- Cranston Cross-City Bicycle Corridor Enhancement – Final Design/Sign Procurement
- Manville Landing Project in Cumberland – Preliminary Design
- Design by DEM of the Route 95 Bikeway Access Project – Design Commenced
- Westminster Street Revitalization Project – Providence – Design Commenced
- Pawtuxet Village Traffic Calming – in Warwick and Cranston – Preliminary Design
- West Warwick project at Riverpoint – Design Commenced
- Park Avenue Enhancements in Portsmouth – Preliminary Design

- Blackstone Navigation Projects in Woonsocket and Pawtucket – Design Start
- Charlestown Gateway Project – Design Start

Congestion Mitigation Air Quality (CMAQ) Program Accomplishments:

Completed a Call for Projects under the CMAQ Program and recommended a total of 18 projects proceed at a programmed level of \$22.4 million. The CMAQ Program was approved by the State Planning Council and incorporated into the Transportation Improvement Program (TIP) on November 8, 2000. Staff also continued managing funding of on-going CMAQ Program and provided project management and coordination activity where required.

Water Transportation Accomplishments:

- Construction started on the Newport Marine Facilities Project. Improvements are being made at Fort Adams and Perrotti Park, which will serve as the hub for continued water transportation. It is anticipated that this project will be complete in June 2001.



RIPTA's high speed ferry, The Anna.

- Ferry service between Providence and Newport was initiated. Over 40,000 passengers utilized this service in the first year. Service will continue in 2001.

Rail Program Accomplishments:

- The Warwick Train Station progressed into the design phase. Extensive coordination with Rhode Island Airport Corporation (RIAC) was initiated to relocate and consolidate all rental car agencies to a facility adjacent to the train station. Property acquisition phase was completed on the Leviton, Budget and Baylis properties. The site remediation contract was awarded for the cleanup of the T.H. Baylis Chemical site.
- Three round trips were added to the existing MBTA Providence-Boston commuter rail service and we worked with the MBTA on service expansion.

Bicycle Program Accomplishments:

- Completed construction on Contract 2 of the Washington Secondary Bike Path in West Warwick. Design progressed on Contract 3 (Warwick) and Contract 4 (West Warwick) to 90%.
- Rhode Island National Guard completed the redecking of four bridges along the Washington Secondary Bike Path.

Community Affairs Office

The Community Affairs Section is charged with keeping information lines open between the citizens of the State and RIDOT. This is accomplished by incorporating several methods and strategies of effective public information such as community meetings, written media interaction, radio and television contacts, business contacts and ongoing communication with local public officials. By responding as quickly as possible to inquiries about RIDOT projects, the Office also serves as a problem resolution-clearing house.

The Community Affairs Office encourages communication with Rhode Islanders by informing the public of future plans, present status, and anticipated work schedules for upcoming projects.

This is designed to be a proactive public information program and encourages interested citizens to become involved in projects; voice their opinions and become part of the decision-making process.

The Community Affairs Office works to bring potential problems or controversial issues up early so they can be addressed in the planning and design phases of a project.

The Community Affairs Office provides assistance to other RIDOT sections including producing project specific slide shows, displays and videos, brochures, and fact sheets.

Unit Objectives

- To provide adequate, timely information to the public, emergency personnel and

elected officials regarding transportation projects that will influence their daily lives;

- To provide a timely response to telephone/written complaints regarding individual projects and to provide support to other sections within RIDOT.

FY 2000 Accomplishments:

- Hosted Highway Engineering Exchange Program (HEEP) Annual Meeting at the Radisson Hotel in Warwick, RI.
- Attended Jewelry District and I-195 Advisory meetings and maintained liaison with outside groups on important RIDOT projects.
- Provided support for more than 25 meetings on major RIDOT projects including: ADA room arrangements,

developing and mailing brochures, staffing meeting and providing full meeting follow up with public and elected officials.

- Developed and printed more than 35 general information construction brochures for neighborhoods impacted by our projects.
- Provided construction updates to the public on progress of projects and changes that may be occurring in ongoing work.
- Worked closely with minority community groups to produce bilingual flyers for community to explain DOT projects.
- Intelligent Transportation Society (ITS) Rhode Island Chapter, Community Affairs assisted with creating chapter and working on publication committee.

administrative services DIVISION

The primary responsibilities of the Administrative Services Division are the development and implementation of a comprehensive administrative support services program; to ensure the effective and efficient achievement of departmental policies, goals and objectives; and to ensure that resources are utilized in conformance with state and federal laws, rules and regulations.

The Administrative Services Division oversees and manages Contract Administration, the Office of Civil Rights, and is responsible for the partnership with the University of Rhode Island Transportation Center.

The Administrative Services Division also maintains and manages the following programs:

The RIDOT Technology Program (T2)

This program is designed to transfer the latest technology in transportation systems to local cities, towns, and public works departments. This will be accomplished through a series of workshops and conferences.

The Transportation Center

RIDOT was the major stakeholder in assisting to secure from USDOT a \$12 million, six year grant for the University of Rhode Island (URI) to develop and administer the University Transportation Center (UTC). The UTC at URI is now in its third year of operation, and is quickly becoming a center of excellence in the areas of research, technical and business development, continuing education, technology transfer and intelligent transportation systems.

RIDOT/URI Education

Partnerships

College of Business Administration

RIDOT entered into an agreement with URI's College of Business Administration, on December 20, 2000 to create a faculty position in the management of transportation systems to teach, conduct research, and participate in outreach programs as part of the Center for Transportation Studies and work with the federal and state transportation agencies. This agreement will support the faculty position for six years and the cost of the said position will be equally shared by both parties. RIDOT, through the Federal Highway Administration, will provide funding for the salary and benefits for the first three years of the faculty member's employment.

College of Engineering

RIDOT entered into an Agreement with URI's College of Engineering on December 20, 2000 to create a Transportation Engineering Faculty Position which will enable the expansion of the URI Transportation Engineering program through a broadened scope of course offerings. This faculty member will develop a transportation oriented research program, develop and teach management, transportation engineering courses in the areas of transportation structure, systems, and management, transportation surveying and mapping, and URI-RIDOT involvement in outreach programs. RIDOT, through Federal Highway Administration, will provide funding for the first three years of the faculty member's employment.

RIDOT Transportation Research Activities Center (TRAC)

TRAC is a transportation engineering, management and education program that has been integrated into the math, social studies or science classrooms of 18 Rhode Island Schools. RIDOT TRAC has been strengthened with the addition of a full time TRAC coordinator, and the upgrading of equipment utilized by the RIDOT TRAC schools. RIDOT plans to further strengthen the program with intensive training for TRAC teachers and volunteer engineers, as well as, a strong and comprehensive support

system for the teachers, schools and engineers. The Department's goal is to establish an environment in each of the TRAC schools which serves to encourage minority and female students to seek careers in transportation engineering fields. The Department is also exploring potential partnerships and information sharing with international TRAC participants.

Archeological Summer Institute

The Department, in partnership with the Federal Highway Administration (FHWA), the Narragansett Indian Tribe and URI will partner again this summer to conduct the Third Annual Archaeology Summer Institute. This institute has enhanced skill development and cultural appreciation for Indian peoples, and also provides an opportunity for cultural exchange between the Narragansett Indian and non-Indian communities.

Rhode Island Department of Transportation Trails Program

This year RIDOT will partner with the Rhode Island Recreational Trails Program to develop two trail programs to advance the Department's commitment to our youth and the Native American community of Rhode Island, while also initiating enhancement and beautification projects that add value to the state's trail network.

Office of Civil Rights

In March 2001, the Rhode Island Department of Transportation's DBE Supportive Services Satellite Office will herald the opening of the first RIDOT Disadvantaged Business Enterprise Satellite Support Services Office located at 570 Broad Street. This community based site office provides greater accessibility for clients and others interested in pursuing RIDOT contracts, and provides visibility for RIDOT as a supporter of the community. Additionally, this space will provide a research and training area for small business professionals.

Rhode Island Department of Transportation Emerging Business Program

The year 2001 will see marked growth in this program with the additional of several new small business initiatives. The Administrative Division has researched the current and future needs of the construction industry in Rhode Island, and are now outlining programs that will assist new and existing DBE firms with business and technical training; a unique on-location job shadowing/mentoring program; an equipment purchasing program, and a financial access and development program. All of these programs are designed to increase the usage and performance of minority and women owned businesses.

Disadvantaged Businesses Enterprise (DBE) Program Utilization for 2000

Total Federal Dollar Value of Prime

Contracts (60) = \$88,456,375.55

Total Federal Dollar Value of DBE Contracts (49) = \$ 7,717,494.74 (8.72%)

Contract Administration

Contract Administration serves to establish formal business arrangements between RIDOT and suppliers of all major goods and services the Department deems necessary to purchase from the private sector. To do so requires:

- Direct participation in a competitive selection process in adherence to all applicable federal and state procurement requirements; and
- Establishing contract documents which best serve the state's interest toward accomplishing the initiative at hand.

Contract Administration

	Number of Projects	Total Dollars
2000	63	\$73.7 M
1999	72	\$101.0 M
1998	73	\$67.6 M
1997	35	\$36.2 M

Most typically this includes the administration of Request-for-Proposals to engage professional engineering and other professional services; and competitive bids to hire general construction contractors to respectively design and complete construction projects on the state's roads and bridges. This occurs in coordination with the Department of Administration's Office of Purchases.

Major Milestones – FY 2000

- A total of four engineering projects were awarded this year valued at a total of \$1.3 million. In addition, negotiations continue toward award for some 20 additional engineering projects.
- Successfully implemented RIDOT's FY 2000 construction project workload. A total of 63 construction projects were awarded this year valued at total of \$73.7 million. This volume and dollar value continue the pattern begun in FY 1998 where DOT's construction workload is double that of all recent years.
- Contract Administration continues to adopt improvements and efficiencies using web-based technology.

Management Information Systems (MIS)

The Management Information Systems (MIS) Unit is comprised of Administrative, Programming, Technical Support and Geographic Information Systems (GIS) professionals, which are responsible for all computer and communication needs.

Administrative Staff

The Administrative staff manages the day-to-day activities of the Unit. This includes ordering and maintaining an inventory for everything related to computer hardware, software and related supplies for the entire Department. They also ensure that the user receives their requested output, and that the data residing on the servers is backed up and stored safely.

Programming Unit

The Programming Unit maintains the timesheet system on the Data General while rewriting it to a PC platform. Many sections currently use the programmers' services to develop custom systems to meet their needs on the PC Platform. Currently, the Department supports Visual Basic 6.0, MS Access 97, and Oracle.

Technical Support Unit

The Technical Support Unit maintains the Local Area Network (LAN), comprised of 18 servers, which controls the services needed to enable continuity to all 500 DOT users, as well as the Wide Area Network (WAN) and the World Wide Web (WWW).

The staff continues to automate the needs of the Department, which includes: networking new computers; maintaining and upgrading older computers, printers and software; and overseeing various other computers peripheral. The procurement of telephone and data lines are also managed by this Unit, in addition to supporting the definity audix telephone system and conversant.

GIS Unit

The GIS Unit is striving to unite the Department through cartography services for many sections within Department, as well as outside agencies and cities and towns.

Recent projects and activities: 1:24K to 1:5K basemap migration, Project Tracking, Accident, Traffic Signal, Closed Circuit Television and Variable Message Systems mapping and various maintenance applications. MIS has continued the development of a central data repository through the integration of databases - layers of information for DOT maps.

Fleet Operations

The Fleet Operations Unit is composed of a Fleet Management Officer and four Support Personnel. The Unit's primary function is to maintain and enhance the quality of the Department's communications systems and fleet of vehicles, and to keep them in good, safe operating condition.

Unit Objective

- Continually monitor and review vehicle maintenance costs and records for improved vehicle history and analysis.
- Oversee and enforce maintenance on all vehicles every 2500 miles or three months, whichever comes first.
- Perform annual vehicle inspection.
- Improve efficiency in servicing of vehicles and communications equipment.
- Achieve efficient utilization of entire fleet.

Current Year Program

- Because of tire problems (Firestone, Bridgestone) and the malfunctioning of bi-fuel valves, RIDOT was unable to complete the last phase of our vehicle replacement as planned. Therefore, what was to take place last year will now become this year's program.
- Replace remaining 60% of Fleet with 2001 F150 bi-fuel Super Duty Pick-ups.

Fiscal Year 2001-2002 Program

- Continue to streamline and enhance our wireless communication system (147 units).
- Establish a comprehensive two year plan for replacement of vehicles seven years of age or older.

Facilities and Property Management

This Office is responsible for the planning and implementation of a comprehensive program for the replacement and/or maintenance of its structures, as well as the management of all land acquired for roadway and related purposes.

Routinely this Office responds to requests from the general public for the sale or lease of its property. It is also charged with the responsibility of securing suitable office space for Department employees.

This Office works closely with the State Building Code Commissioner's office, and the Governor's Commission on Disabilities to insure that all of our structures are in compliance with the American's with Disabilities Act (ADA) Code.

External Audit and Review

The primary function of External Audit and Review is to examine contract costs submitted by various external entities, such as utility companies, engineering consultants, and municipalities in accordance with governing regulations.

A computerized audit inventory tracking system is now used to facilitate tracking, scheduling, and evaluation of audit projects.

In 2000 External Audit and Review further reduced the backlog of unaudited projects and improved the process of performing interim contract audits to facilitate the finalization process.

rhode island **DEPARTMENT OF TRANSPORTATION**
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